MP MASTER
MA36344

MOTOROLA

DYNAMIC MICROPHONES

WITH TRANSISTORIZED PRE-AMPLIFIER

Model TMN6041A

MODEL	APPLICATION
TMN6042A	Standard Squelch
TMN6041A	"Private-Line" Disabling

1. DESCRIPTION AND APPLICATION

The Motorola TMN6042A Desk-Stand Dynamic Microphone is a uni-directional microphone. It has a two stage transistor amplifier, a 7-foot stranded cord, with spade lugs and a TRANSMIT switch mounted in its desk-stand base.

The Motorola TMN6041A Desk-Stand Dynamic Microphone is the same as the TMN6042A Microphone, except for the addition of a MONITOR switch. The switch provides "Private-Line" disabling of equipment employing Motorola's "Private-Line" squelch circuits.

The radio set "PL" switch should be left in the "ON" position to provide the proper "Private-Line" disabling function of the radio set from this desk-stand microphone.

2. INSTALLATION

Connect the lug termination cord as indicated in the schematic diagram.

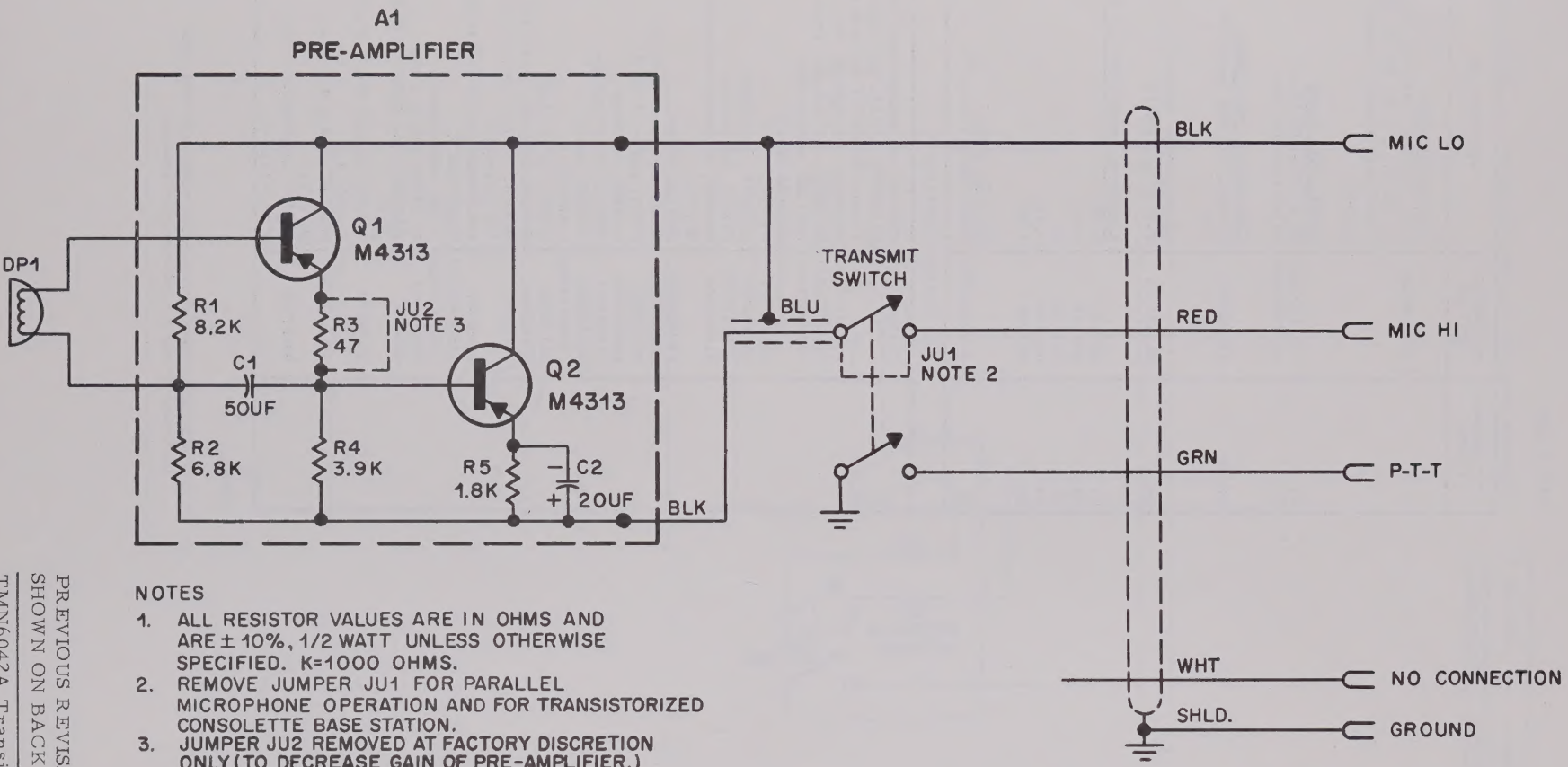
3. DATA INCLUDED

TMN6042A Schematic Diagram	63B81111A32
TMN6041A Schematic Diagram	63B81111A52

MOTOROLA INC. Communications Division
ENGINEERING PUBLICATIONS 4501 WEST AUGUSTA BOULEVARD CHICAGO, ILLINOIS 60651

Copyright 1967 by Motorola, Inc.
Printed in U.S.A.
6/14/67-UP

68P81111A31
Issue - C



NOTES

1. ALL RESISTOR VALUES ARE IN OHMS AND ARE ± 10%, 1/2 WATT UNLESS OTHERWISE SPECIFIED. K=1000 OHMS.
2. REMOVE JUMPER JU1 FOR PARALLEL MICROPHONE OPERATION AND FOR TRANSISTORIZED CONSOLETTE BASE STATION.
3. JUMPER JU2 REMOVED AT FACTORY DISCRETION ONLY (TO DECREASE GAIN OF PRE-AMPLIFIER.)

DIAGRAM NO. 63B81111A32-01

MODEL	SUFFIX	DESCRIPTION
TMN6042A		DYNAMIC MICROPHONE WITH TRANSISTORIZED PRE-AMPLIFIER

PREVIOUS REVISIONS AND PARTS LIST SHOWN ON BACK OF THIS DIAGRAM

TMN6042A Transistorized Dynamic Microphone
Schematic Diagram
Motorola No. 63B81111A32-01
6/14/67-UP

REVISIONS

DIAG. ISSUE	CHASSIS AND SUFFIX NO.	REF. SYMBOL	CHANGE	LOCATION
01			NOTE 2 REVISED	SCHEM. DIAG.

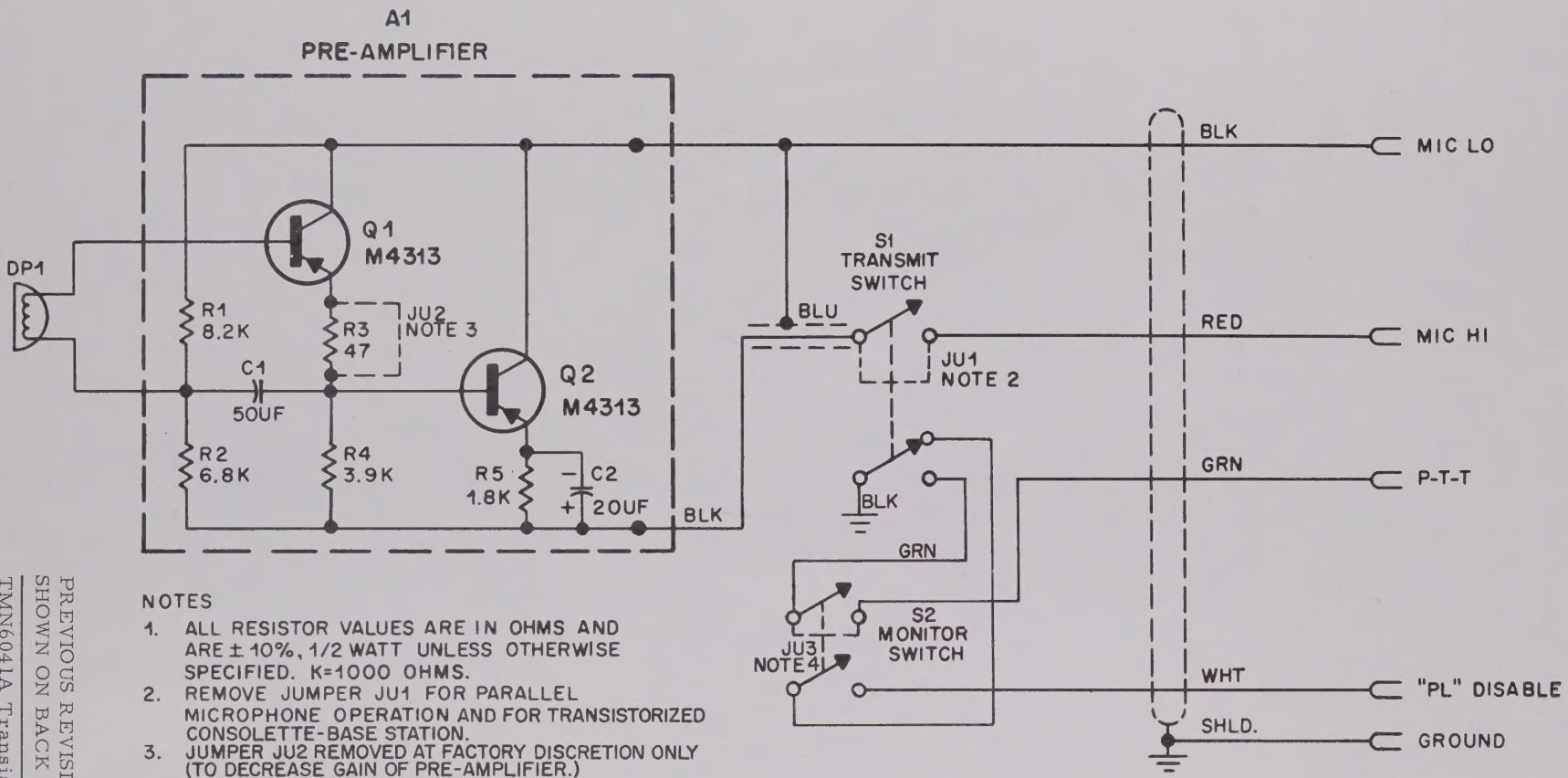
PARTS LIST

TMN6042A Desk Stand, Dynamic Microphone EPD-13647-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		PREAMPLIFIER:
A1	1V80705A81	assy: incl. ref. parts C1, C2, Q1, Q2, R1, R2, R3, R4, R5 and 1V80705A82 BOARD, circuit; eyeleted
		CAPACITOR, fixed:
C1	23C82601A05	50 uf +150-10%; 25 v
C2	23C82601A03	20 uf +100-10%; 25 v
		CARTRIDGE, microphone:
DP1	59C852603	dynamic; 175 ohm imped. at 1 kc
		TRANSISTOR: (SEE NOTE)
Q1, 2	48A124313	P-N-P; type M4313
		RESISTOR, fixed: ±10%; 1/2 w
R1	6R2004	8.2K
R2	6R6428	6.8K
R3	6R5550	57
R4	6R5659	3.9K
R5	6R2089	1.8K
		SWITCH, push:
S1	40C83298B01	single stack; 2 form "A"
	NON-REFERENCED ITEMS	
	1V80748A53	CABLE, microphone: assy. incl. 30A800972 CABLE, microphone: 4 cond. shielded (7 ft. req'd.)
	15C83171B01	HOUSING, microphone: rear
	15D83172B01	HOUSING, microphone: front
	13B83173B01	GRILLE, microphone: perforated metal
	35A852701	CLOTH, grille
	32B852702	GASKET, microphone
	7D83175B01	STAND, microphone
	41A855004	SPRING, pushbutton retractor; (2 req'd.)
	64B855001	COVER, bottom
	46B854311	STUD, tri-mount (4 req'd.)
	75A838826	FOOT, rubber (4 req'd.)
	42A852705	CLAMP, cartridge
	14A857137	INSULATOR, cartridge
	42A855002	CLAMP, cable
	13B83174B01	EMBLEM
	31S124665	STRIP, term; 2 cont.
	3S127924	SCREW, lock: No. 6-32 x 5/16"
	3S132401	SCREW, machine: No. 6-32 x 7/8" (2 req'd.)
	4S400386	LOCKWASHER: No. 6 (2 req'd.)
	33B82828C14	NAMEPLATE
	47B83176B01	TUBE, microphone
	38B855008	BUTTON, push (2 req'd.)
	4S7607	WASHER, flat: 9/32" x 1/8" x .027"
	3S129602	SCREW, tapping: No. 4-40 x 3/4" (2 req'd.)
	3S8180	SCREW, tapping: 4" x 5/16" (2 req'd.)
	3S127015	SCREW, tapping: No. 6-32 x 1/4" (2 req'd.)

NOTE:

Replacement transistors must be ordered by Motorola part number only for optimum performance.



NOTES

1. ALL RESISTOR VALUES ARE IN OHMS AND ARE ± 10%, 1/2 WATT UNLESS OTHERWISE SPECIFIED. K=1000 OHMS.
2. REMOVE JUMPER JU1 FOR PARALLEL MICROPHONE OPERATION AND FOR TRANSISTORIZED CONSOLETTE-BASE STATION.
3. JUMPER JU2 REMOVED AT FACTORY DISCRETION ONLY (TO DECREASE GAIN OF PRE-AMPLIFIER.)
4. REMOVE JU3 FOR "MONITOR REQUIRED BEFORE TRANSMIT" OPERATION.

DIAGRAM NO. 63B81111A52-B

MODEL	SUFFIX	DESCRIPTION
TMN6041A	1	DYNAMIC MICROPHONE WITH TRANSISTORIZED PRE-AMPLIFIER

PREVIOUS REVISIONS AND PARTS LIST SHOWN ON BACK OF THIS DIAGRAM

TMN6041A Transistorized Dynamic Microphone
Schematic Diagram
Motorola No. 63B81111A52-B
6/14/67-UP

REVISIONS

DIAG. ISSUE	CHASSIS AND SUFFIX NO.	REF. SYMBOL	CHANGE	LOCATION
A	TMN6041A	NON-REF	REMOVED 1V855256 CABLE, MICRO-PHONE	PARTS LIST
A1	TMN6041A	NON-REF	3S7362 WAS 3S7363 (P/O 1V844635 TER-MINAL BRACKET ASSEMBLY	PARTS LIST
A2			NOTE 2 REVISED	SCHEM. DIAG.
B	TMN6041A	S1	WAS 20C83298B01, 2 FORM "A"	SCHEM. DIAG. & PARTS LIST

PARTS LIST

TMN6041A Desk Stand, Dynamic Microphone EPD-13646-C

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		PREAMPLIFIER:
A1	1V80705A81	assy; incl. ref. parts C1, C2, Q1, Q2, R1, R2, R3, R4, R5 and 1V80705A82 BOARD, circuit; eyeleted
		CAPACITOR, fixed:
C1	23C82601A05	50 uf +150-10%; 25 v
C2	23C82601A03	20 uf +100-10%; 25 v
		CARTRIDGE, microphone:
DP1	59C852603	dynamic; 175 ohm imped. at 1 kc
		TRANSISTOR: (SEE NOTE)
Q1, 2	48A124313	P-N-P; type M4313
		RESISTOR, fixed: ±10%; 1/2 w
R1	6R2004	8.2K
R2	6R6428	6.8K
R3	6R5550	47
R4	6R5659	3.9K
R5	6R2089	1.8K
		SWITCH, push:
S1	40C83298B02	single stack 1 form "A" 1 form "C"
S2	40C83298B01	single stack; 2 form "A"
	NON-REFERENCED ITEMS	
	14A861196	INSULATOR, transistor (used with Q1, Q2)
	75A838826	BUMPER, rubber (4 req'd.)
	4S400386	LOCKWASHER: No. 6 (2 req'd.)
	3S128052	SCREW, tapping No. 6 x 5/16" (2 req'd.)
	15C83171B01	HOUSING, microphone; rear
	15C83172B01	HOUSING, microphone; front
	13B83173B01	GRILLE, microphone: perforated metal
	13B83174B01	EMBLEM
	35A852701	CLOTH, grille
	32B852702	GASKET, microphone
	7D83175B01	STAND, microphone
	41A855004	SPRING, pushbutton retractor; (2 req'd.)
	31R724665	STRIP, term: 2 cont.
	3S127924	SCREW, lock: No. 6-32 x 5/16"
	3S132401	SCREW, machine: No. 6-32 x 7/8" (2 req'd.)
	33B82828C15	NAMEPLATE
	47B83176B01	TUBE, microphone
	3S129602	SCREW, tapping: No. 4-40 x 3/4" (4 req'd.)
	4S7607	WASHER, flat 9/32" x 1/8" x .027" (3 req'd.)
	64B855001	COVER, bottom
	46B854311	STUD, tri-mount: (4 req'd.)
	42A852705	CLAMP, cartridge
	14A857137	INSULATOR, cartridge
	1V80748A53	CABLE, microphone: assy; incl. 30A800972 CABLE, micro-phone: 4 cond. shielded; 9 ft. req'd.
	42A855002	CLAMP, cable
	38B855009	BUTTON, push (Transmit)
	38K855010	BUTTON, push (Monitor)
	1V844635	TERMINAL BRACKET ASSY. incl: 7A844631 BRACKET, term 4K691205 WASHER, shoulder 4K51143 WASHER, fibre 6R2075 RESISTOR, fixed: 12K ±5%; 1/2 w (2 req'd.) 2S7002 NUT, hex: #6-32 x 5/16" (2 req'd.) 3S7362 SCREW, machine: #6-32 x 1/2"

NOTE:

Replacement transistors must be ordered by Motorola part number only for optimum performance.

MP MASTER
MA36344